or

wherein n=1, 2, 3, and 4, and

R₁ includes hydrogen, hydrocarbyl, phenyl, methoxyphenyl, alkylphenyl, substituted alkyl, and substituted phenyl; R₂ includes hydrogen, hydrocarbyl, phenyl, methoxyphenyl, alkylphenyl, substituted alkyl, substituted phenyl, alkylene, phenylene, substituted alkylene, and substituted phenylene, and R₃ includes alkylene, phenylene, substituted alkylene, or substituted phenylene, and

wherein R₄, R₅, and R₆ individually include alkylene, phenylene, substituted alkylene, or substituted phenylene, and R₇, R₈ and R₉ individually include hydrogen, hydrocarbyl, phenyl, methoxyphenyl, alkylphenyl, substituted alkyl, and substituted phenyl.

REMARKS

The Applicant would like to express appreciation to the Examiner for the courtesy extended to the Applicant's attorney during the telephone interview on November 9, 2001. Claims 1-27 are pending in the application, all of which are rejected. In this Reply, claims 3-5 are incorporated into claim 1 and, therefore, are canceled without prejudice and disclaimer. Claims 1 is amended to specify the type of ester compounds used in the claimed gel composition. Support for this amendment can be found, for example, in original claims 3, 4 and 5. Claim 1 is further amended to recite that the gel composition is substantially free of mineral oils. Support for this amendment can be found, for example, in original claim 2 and Tables III-V on pages 41-42. None of the examples in Tables III-V includes a mineral oil. The term "mineral oil" is understood in the art to refer to hydrocarbon oils. In particular, the term "mineral oil" encompasses the oils used in the gels disclosed in WO 91/05014. Similar to

claim 1, claim 25 is amended accordingly. Upon the entry of these amendments, claims 1-2 and 6-27 are pending in this patent application. Appendix A is a marked-up copy showing all amendments, and Appendix B is a clean copy showing all pending claims. The Applicant respectfully submits that no new matter has been introduced.

RESPONSE TO REJECTION UNDER 35 U.S.C. § 103

Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takiguchi et al., U.S. Patent No. 4,748,199 ("Takiguchi") or Diehl et al., U.S. Patent No. 5,399,627 ("Diehl") or PCT WO 91-05014 ("PCT '014") each taken alone and in the alternative. In making the rejection, the Examiner states the following:

Each of these patents shows gel compositions which are based on the block copolymers having ester compounds incorporated therein. See specifically columns 6 and 7 of the Diehl et al. patent, the Abstract as well as columns 4 and 5 of the Takiguchi et al. patent and the PCT document throughout the Examples. While it is noted that some of applicants' claims contain the language "substantially free of mineral oils", there remains no quantitative measure of exactly what "substantially free" means and as such, the relative terminology is seen to be anticipated by the prior art. Furthermore, the prior art does show compositions which have no mineral oil in them and it is prima facie obvious to leave out an ingredients and lose its known function.

Office Action of October 2, 2001, pages 2-3.

The Applicant has reviewed the above references and respectfully disagree that the above references, singularly or in combination, render the claimed invention obvious. The Applicant's reasons are stated as follows.

APPLICABLE LAW

To reject claims of an application under 35 U.S.C. § 103(a), an examiner has the burden of establishing an unrebutted prima facie case of obviousness. See In re Deuel, 51 F.3d 1552, 1557, 34 U.S.P.Q.2d 1210, 1214 (Fed. Cir. 1995). In the absence of a proper prima facie case of

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obviousness, an applicant who complies with the other statutory requirements is entitled to a patent. See In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992). Obviousness cannot be established by modifying or combining the teaching of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the modification or combination. See In re Geiger, 815 F.2d 686, 688, 2 U.S.P.Q.2d 1276, 1278 (Fed. Cir. 1987). Furthermore, the motivation to modify or combine the teachings of the prior art must be identified in making and sustaining an obviousness rejection. See In re Rouffet, 149 F.3d 1350, 47 U.S.P.Q.2d 1453 (Fed. Cir. 1998) (reversing an obviousness rejection for lack of identification by the Examiner and the Board of motivation to combine prior art references). Where cited references, alone or in combination, do not suggest or teach the claimed invention, no prima facie case of obviousness has been established and such obviousness rejection is improper. In re Fine, 5 U.S.P.Q.2d 1596, 1599 (Fed. Cir. 1988); In re Evanega, 829 F.2d 1110, 4 U.S.P.Q.2d 1249 (Fed. Cir. 1987) (reversing an obviousness rejection because the prior art did not teach a claimed limitation). In other words, the absence of a suggestion to combine in the prior art references is dispositive of an obviousness determination. See Gambro Lundia AB v. Baxter Healthcare Corp., 110 F.3d 1573, 1578-79, 42 U.S.P.Q.2d 1378, 1383 (Fed. Cir. 1997).

According to MPEP § 706.02(j), to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). *See also MPEP* § 2143 (8th ed. 2001).

APPLICATION OF THE LAW

The Applicant respectfully submits that the three cited references, individually or in combination, do not teach, suggest, or disclose all limitations of the claimed invention. In particular, *Takiguchi* (i.e.,

U.S. Patent No. 4,748,199) discloses a vulcanizable rubber composition obtained by mixing carbon black, a low temperature plasticizing ester, a rubber component, and/or a naphthenic or paraffinic softener. See column 3, lines 25-40. However, there is no disclosure of using a triblock copolymer, star polymer, radial polymer, multi-block copolymer, or a combination thereof in a gel composition. The structures of these polymers are illustrated in Figures 1-5 of the Applicant's specification. The Applicant respectfully submits that a rubber component does not have a structure that can be considered as a triblock copolymer, star polymer, radial polymer, multi-block copolymer, or combination thereof. Therefore, Takiguchi does not teach, suggest, or disclose all limitations of the claimed invention.

Diehl (i.e., U.S. Patent No. 5,399,627) discloses a pressure sensitive adhesive composition comprising a radial block copolymer, a tackifying resin, a stabilizer, and a liquid tackifying resin, a plasticizing oil or combination of liquid tackifying and plasticizing oil. See column 2, lines 34-37. The tackifying resins may include hydrocarbon resins, synthetic polyterpenes, rosin esters and natural terpenes which are semi-solid or solid at ambient temperatures but soften or become liquid at temperatures ranging from 70° C. to 135° C. See column 6, lines 43-50. Moreover, the adhesive composition of the invention may contain plasticizers, such as rubber extending plasticizers, or compounding oils or liquid resins, such as liquid tackifyers. In contrast, the claimed gel composition does not include a tackifying resin. Moreover, it is substantially free of mineral oils, i.e., hydrocarbon oils. The ester compound used in the gel composition does not include tackifying resins with ester functionalities. Therefore, Diehl does not disclose, teach, or suggest all limitations of the claimed gel composition.

WO 91/05014 discloses gels which are an intimate mixture of (1) at least one block copolymer containing relatively hard blocks and relatively elastomeric blocks; (2) an extender liquid which extends and softens the elastomeric blocks (present in at least 300 parts by weight of the extender liquid per 100 parts of the block copolymer); (3) a plasticizer-stabilizing additive (present by at least 50 parts per 100 parts by weight of the block copolymer). See page 2. The extender liquids are hydrocarbon oils, such as paraffinic or naphthenic oils, synthetic oils, or mixtures thereof. See pages 9-10. The oil extender may be present by as much as 71.5 weight percent. See page 5. In contrast, the claimed gel

composition is substantially free of mineral oils. As pointed out recently by the Federal Circuit in *Ecolab v. Envirochem*, 60 U.S.P.Q.2d 1773 (Fed. Cir. 2001), the term "substantially" is a descriptive term commonly used in patent claims to avoid a strict numerical boundary to a specified parameter. Therefore, "substantially" is a proper claim language. The term "substantially free of mineral oils" used herein means no significant amount of mineral oils is present. However, the presence of hydrocarbon oils by about 71 wt.% is a significant amount. Moreover, there is no teaching or suggestion to reduce or eliminate the amount of hydrocarbon oils in the disclosed gels. Consequently, WO 91/05014 does not teach, suggest, or disclose all limitations of the claimed gel composition. For the above reasons, *Takiguchi*, *Diehl* and WO 91/05014, individually or in combination, do not teach, suggest or disclose all limitations of the claimed gel composition. Therefore, a *prima facie* case of obviousness has not been established.

Finally, the Applicant wishes to point out some unexpected results obtained from the use of the claimed gel compositions. For example, Example 8 demonstrates that a sun screen lotion based on a gelled ester composition increases the waterproof efficacy of the sun screen lotion. Example 9 demonstrates that gelled esters are effective in retaining moisture in the skin, and its performance is comparable to petrolatum as an occlusive agent. Moreover, Example 10 shows that a gelled composition has significantly higher loading capacity as a suspension system. Specifically, the loading capacity of a gelled soybean oil is about 25 times more than that of a neat soybean oil. These results are not expected from the vantage point of a person of ordinary skill in the art. These unexpected results support a finding of unobviousness of the claimed invention.

In sum, none of the cited references, individually or in combination, teaches, suggests, or discloses all limitations of the claimed invention. Moreover, unexpected results are obtained with the gel compositions made in accordance with embodiments of the invention. Therefore, all pending claims, i.e., claims 1-2 and 6-27, are not rendered obvious by prior art and, thus, are patentable.

CONCLUSION

The Applicant has addressed all of the Examiner's rejections. In conjunction with the claim amendments and arguments above, the Applicant believes that the claims are now in condition for

allowance and respectfully request that the Examiner grant such an action. If any questions or issues remain in the resolution of which the Examiner feels will be advanced by a conference with the Applicant's attorney, the Examiner is invited to contact the attorney at the number noted below.

No fees are due as a result of this Reply. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Deposit Account No. 10-0447, reference 42133.9USPT(BAI).

Respectfully submitted,

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Date: \(\lambda / \frac{30}{200} \)

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